Work Or	der ID	56790
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March 10, 2010 9:54:59 AM



Page 1

Item ID:

D205-634-041

Accept



Setup Start

Stop



**Revision ID:** 

Item Name:

Replacement Skidtube

**Start Date:** 

10/03/2010

Start Otv: 1.00

**Required Date: 26/03/2010** Req'd Qty: 1.00



**Cust Item ID: Customer:** 

Reference:

Approvals:

Date/03-10 Tooling:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Reject

Qty



Sequence ID/ Work Center ID

Operation Description Set Up/ **Run Hours** 

Draw Number

Draw Plan Rev. Code Accept Qty

Reject Number

M10/3/15

Insp. Stamp

**Draw Nbr** 

**Revision Nbr** 

QC:

D2580

100

Rev D

DOCUMENT CONTROL

Memo

0.00

0.00

**Document Control** 

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002 CHG002

Sistoylor

110

CNC Bend 1

**BENDING MACHINE - SKIDTUBES** 

Memo

0.00

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio FT009

2-Cut tubes as per Dwg. D2580

W/O:			WC	RK ORDER CHANG	iES					٤
DATE	STEP	PROCEDURE CHANGE			В	/	Date	Qty	Approval Chief Eng / * Prod Mgr	Approval QC Inspector
100 L.										
Part No	:	PAR #:	Fault Cate	gory:	_ NCR: \	′es N	lo <b>DQ</b>	A:	Date:	
	Resolution: Disposition:				_ QA: N/	QA: N/C Closed: Date:				
NCR:		1	WORK ORDE	ER NON-CONFORMA	ANCE (N	ICR)				
DATE	OTED	Description of NC Corrective Action S			tion B		Verific	Verification A		Approval
DATE	STEP Description of NC Section A	Initial Chief Eng	Action Description Chief Eng		gn & Date	Section C		Approval Chief Eng	QC Inspector	
				****		7.7				

March 10, 2610 9:54:59 AM



Page 2

Item ID:

D205-634-041

Accept



Setup Start



**Revision ID:** 

Item Name:

Replacement Skidtube

**Start Date:** 

10/03/2010

Start Otv: 1.00

**Required Date: 26/03/2010** Req'd Qty: 1.00

Date:

**Cust Item ID: Customer:** 

Draw

Number

Reference:

**Approvals:** 

Process Plan:

Operation

Description

Date:

Tooling:

SPC (Y/N):

Set Up/

0.00

0.00

**Run Hours** 

Date:

Date:

Draw

Rev.

Plan

Code

Start

Run

Accept

Qty

Stop

Reject

Stop

Reject

Qty

Number Stamp

410/3/15

Insp.

Sequence ID/ **Work Center ID** 

120

Skidtubes Skidtubes

Memo

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

130

**Quality Control** 

QC

QC5- Inspect part completeness to step on W/O

0.00

Memo

1 D BE 10/03/15

0.00

Dart Ae	rospace l	_td								
W/O:			W	ORK ORDER	CHANGES					į
DATE STEP		PRO	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / * Prod Mgr	Approval QC Inspector
					A COLOR					
•				•	·					
Part No	:	PAR #:	Fault Cat	egory:	NC	R: Yes	.No DQ	A:	_ Date: _	
•		Disposition: Q			A: N/C CI	osed:		Date:		
NCR:			WORK ORE	DER NON-CO	NFORMANC	E (NCF	?)			
DATE	STEP	Description of NC	Corrective Action Section B			Veriticat			Approval	Approval
DAIE	SIEP	Section A	Initial Chief Eng		escription Sign & Date			ion C	Chief Eng	QC Inspector
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March 10, 2010 9:54:59 AM



Page 3

Item ID:

D205-634-041

Accept



Setup Start



**Revision ID:** 

Item Name: Replacement Skidtube

10/03/2010

Start Qty: 1.00

**Required Date: 26/03/2010** Reg'd Oty: 1.00

**Cust Item ID: Customer:** 

Reference:

**Start Date:** 

Approvals:	
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OC:

Process Plan:

Date:

**Tooling:** SPC (Y/N): Date:

Date:

Start

Stop

Stop



Sequence ID/ **Work Center ID** 

Operation Description Set Up/ **Run Hours**  Draw Number

Draw Rev.

Plan Accept Code **Qty** 

Reject **Qty** 

Run

Reject Insp. Number Stamp

140



Skidtubes Skidtubes

Memo

0.00

0.00

1-Weld step D2576 as per Dwg. D2580 and OSI 004 A/R□□□ Aluminum Rod

Date:

2-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill A/R \( \Pi \) \( \Pi \

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64", adjust stopper not to hit web.Deburr

5-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580. Deburr holes

6-Drill pilot holes for aft cap using DT 8215Open holes to 0.208". Deburr

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Deburr

BE 10/03/17

March 10, 2010 9:54:59 AM



Page 4

Item ID:

D205-634-041

Accept



Setup Start



**Revision ID:** 

Item Name:

Replacement Skidtube

**Start Date:** 

10/03/2010

Start Qty: 1.00

**Required Date: 26/03/2010** Req'd Qty: 1.00



**Cust Item ID: Customer:** 

Reference:

Approvals:

QC: \_\_

Process Plan:

Date: Date:

**Tooling:** SPC (Y/N):

Date:

Date:

Start

Stop

Run

Stop



Operation Description

QC10- Inspect visual per QSI004- ground welds

Set Up/ **Run Hours**  Draw Number

Draw Rev.

Plan

Accept Qty Code

Reject Reject Qty Number

Insp. Stamp

150

Sequence ID/

Work Center ID

Quality Control

Memo

160

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

170

HandFinish

Hand Finishing

Pressure Wash per QSI005 4.3

Memo

0.00

10/03/23

Memo

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

March 10, 2010 9:54:59 AM



Page 5

Item ID:

D205-634-041

Accept



Setup Start



**Revision ID:** 

Item Name:

Replacement Skidtube

**Start Date:** 

10/03/2010

QC:

Start Qty: 1.00

**Required Date: 26/03/2010** Reg'd Qty: 1.00



**Cust Item ID: Customer:** 

Draw

Number

Reference:

**Approvals:** 

Process Plan:

Date:

**Tooling:** 

0.00

0.00

SPC (Y/N):

Date: \_\_\_ Date:

Draw

Rev.

Plan

Code

Start Stop

Reject

Run

Stop

Number Stamp

Insp.

Sequence ID/ **Work Center ID** 

180

Powdercoat

Powder Coating

**Operation** Description

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

M11317 0

Date:

Memo

START TIME: OVEN TEMPERATURE

FINISH TIME:

Set Up/ **Run Hours** 

>N 10/03/2)

Accept

Qty

Reject

Qty

190

QC

QC3- Inspect Part Finish

Memo

0.00

0.00

BR 10-3-24 Dd

Quality Control

March 10, 2010 9:54:59 AM

**Required Date: 26/03/2010** 



Page 6

Item ID:

D205-634-041

Accept



Setup Start

Stop



**Revision ID:** 

Item Name:

Replacement Skidtube

**Start Date:** 

10/03/2010

QC:

Start Oty: 1.00

Reg'd Oty: 1.00

**Cust Item ID: Customer:** 

Reference:

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Process Plan:

Operation

**Description** 

Date: \_\_\_\_ Date:

Tooling:

SPC (Y/N):

Set Up/

**Run Hours** 

Date:

Draw

Number

Date: \_\_\_

Draw

Rev.

Start Run

Reject

**Oty** 

Stop



Number Stamp

Insp.

Reject

Sequence ID/ Work Center ID

200



HandFinish Hand Finishing

0.00

0.00

Memo

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates

A/R □□□ Sikaflex-291 Sikaflex expire date:

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per OSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with

Sikaflex. Clean excess adhesive

A/R TI DE Sikaflex-291, Mll Sikaflex expire date: 2/02

5-Wing Walk as per Dwg D2580 and QSI 005 4.4 Batch:

Plan

Code

Accept

Qty

pl 10-3-24 D.

W/O:	· I			ODK ODDED OHANG	250					7	
DATE	STEP	PRO	WORK ORDER CHANGES ROCEDURE CHANGE				Date	Qty	Approval Chief Eng /	Approval	
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Part No: PAR #:			Fault Ca	legory:	NCR:	Yes 1	lo <b>DQ</b>	DQA: Date:			
Resolution: Disposition:				on:	QA: N	I/C Clo	sed:		Date:		
NCR:	. ,	-	WORK ORI	DER NON-CONFORM	IANCE (	(NCR)	)		·		
		Description of NC	Description of NC Corrective Action			Section B Veri			Approval	Approval	
DATE	STEP	Section A	Initial Action Description Chief Eng Chief Eng			Sign & Date	Verification Section C		Chief Eng	QC Inspector	
		,									
				,							

March 10, 2010 9:54:59 AM



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Item ID:

D205-634-041

Accept



Setup Start



**Revision ID:** 

Item Name:

Replacement Skidtube

**Start Date:** 

10/03/2010

Start Qty: 1.00

Req'd Qty: 1.00



**Cust Item ID:** 

**Customer:** 

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

Stop

QC:

**Required Date: 26/03/2010** 

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID

Operation Description

Set Up/ **Run Hours**  Draw Number

Plan Draw Rev. Code Accept Qty

Reject Qty

Reject Number

Insp. Stamp

210

Quality Control

Memo

0.00

Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for

Foreign objects per QSI 024

QC5- Inspect part completeness to step on W/O

220

Packaging

Packaging

Memo

0.00

0.00

Packaging

Identify and pack for shipping as per PPPD205-634-041

Location:

QC21- Final Inspection - Work Order Release

PPP Rev:

230

Memo

0.00

0.00

10/04/07 ty

Quality Control

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W/O:			WO	RK ORDER CHANGE	S				Τ
DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No		PAR #:							
Resolution: Disposition:				1:	QA: N/C CI	osed:		Date: _	
NCR:		•	WORK ORDE	R NON-CONFORMAL	NCE (NCR	)			
DATE	STEP	Description of NC	Corrective Action   Section B			Sign & Verifica		Approval	
	,	Section A	Chief Eng	Action Description Chief Eng	Date	Sect	ion C	Chief Eng	QC Inspector
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March 10, 2010 9:55:07 AM

Work Order ID: 56790

Parent Item:

D205-634-041

Parent Item Name: Replacement Skidtube

Comments:

D2580-1

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD IPP Rev. O 06.02.28 Added paperwork EC

Manufactured

Manufactured

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

No

No

110

Each

4.0000

1.0000

**Start Date:** 10/03/2010

Start Qty: 1.00

205 Skidtube bent detail

Warehouse	<u>Lo</u>	c Oty	Loc Code	
<b>Location</b>				
Main Warehouse				
LG		4		
54541		2		
56121		2		
	140	Each	130 0000 1 0000	

D2576-3

Step (maching detail)

Loc Code

056767 D M10/3/15

**Required Date: 26/03/2010** 

Required Qty: 1.00

Warehouse	Loc Qty
<b>Location</b>	
Main Warehouse	
ST	130
46661	83
52215	47

BE 10/03/14

W/O:			V	ORK ORDER CHANG	BES		-	-·· · · · · · · · · · · · · · · · · · ·		
DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
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Part No: PAR #:			Fault Ca	egory:	_ NCR: Yes	NCR: Yes No DQA: Date: _				
			Disposit	ion:	QA: N/C (	Closed:		Date: _		
NCR:		,	WORK OR	DER NON-CONFORM	ANCE (NC	R)				
DATE	STEP	Description of NC	C Corrective Action		tion B	cation	ation Approval	Approval		
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign Dat		ion C	Chief Eng	QC Inspector	
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March 10, 2010 9:55:07 AM

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Work Order ID: 56790

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

Parent Item:

IPP Rev:N $\Box$ 02.08.28 $\Box$ FP was QC5 in Step 27; Added QC5 to Step 30 $\Box$ KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

D2579

Manufactured No

Each

140

147.0000 20.0000

Start Date: 10/03/2010

Start Qty: 1.00

Cross	bolt	Sp	ace	er

Warehouse	Loc Qty	Loc Code	
<b>Location</b>			
Main Warehouse			
LG	25		
51525	4		
53780	3		
54543	18		
Main Warehouse			
ST	122		
43988	4		
46434	4		
46956	2		
47797	9		
48272	2		<del></del>
51314	71		
51315	30		

B56715



BG 10/03/16

Page 2

**Required Date: 26/03/2010** 

Required Qty: 1.00

W/O:			WO	RK ORDER CHANGI	ES		-		
DATE	STEP	PRO	OCEDURE CHAN	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
							3		
Part No		PAR #·	Fault Cated	lorv:	NCP: Vos	No. DO	۸.	Data	
Part No: PAR #:									
NCR:				ER NON-CONFORMA					
DATE	STEP	Description of NC		Corrective Action Section		Verific	cation	Approval	Approval
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date		ion C	Chief Eng	QC Inspector
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March 10, 2010 9:55:07 AM

Page 3

Work Order ID: 56790

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

No

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 10/03/2010

Required Date: 26/03/2010

Start Qty: 1.00

Required Qty: 1.00

D2855

Manufactured No

Purchased

200

Each

142.0000 1.0000



Cap

Warehouse	<u>La</u>	oc Oty	Loc Code
<b>Location</b>			
Main Warehouse			
ST026		142	
50513		1	
50770		1	
51539		37	
53791 <b>V</b>		103	
	200	Each	1,405.000 2.0000
			1 (65)( 165)

Bolt

AN3-5A

Warehouse	Loc Oty	Loc Code
<b>Location</b>		
Main Warehouse		
ST350	1405	
100188 105057	188	
105057	1217	

JB 10 3-24.

bl 10-3-24.

W/O:			WC	ORK ORDER CHANG	ES		14.04.1		<del></del>	
DATE	STEP	PR	OCEDURE CHAI		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
		•								
Part No	<u>.</u>	PΔR #·	Fault Cate	norv:	NCR: Ves	No DOA:		Date:		
				NCR: Yes No DQA: Date: QA: N/C Closed: Date:						
NCR:		——————————————————————————————————————		ER NON-CONFORMA						
DATE	STEP Description of NC				Section B Ver			erification Approval		
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	& Section		Chief Eng	Approval QC Inspector	
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				·						

March 10, 2010 9:55:07 AM           Work Order ID:         56790           Parent Item:         D205-634-041           Parent Item Name:         Replacement Skidtube           Comments:         IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ         Start Qty: 1.00         Required Date: 26/03/2           PipP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ         Start Qty: 1.00         Required Qty: 1.00           IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ         Start Qty: 1.00         Required Qty: 1.00           IPP Rev:N□07-07-09 SS Wearplates & Gaskets         JLM         JLM         AN960JD10L         Purchased         No         200         Each         3,105.000         2,0000         IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
Parent Item:         D205-634-041         ####################################
Parent Item:         D205-634-041         ####################################
Parent Item Name:         Replacement Skidtube         Start Date: 10/03/2010         Required Date: 26/03/2010           Comments:         IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD IPP Rev O 06.02.28 Added paperwork EC IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM         Start Qty: 1.00         Required Qty: 1.00           AN960JD10L         Purchased         No         200         Each 3,105.000 2.0000         2.0000           Washer         Warehouse         Loc Oty         Loc Code           Location         Main Warehouse         Main Warehouse
Comments: IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ Start Qty: 1.00 IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD IPP Rev. O 06.02.28 Added paperwork EC IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM  AN960JD10L Purchased No 200 Each 3,105.000 2.0000  Washer    Warehouse   Loc Qty   Loc Code
Washer  Warehouse Loc Oty Loc Code Location  Main Warehouse
Location  Main Warehouse
Main Warehouse
ST348 3105
ALS7-1032-130 Purchased No 200 Each 986.0000 50.0000
Warehouse <u>Loc Oty</u> <u>Loc Code</u>
Location A O

Location

Main Warehouse

ST282 //051/ 986

108606 52

111529 130

111779 34

112772

113238

50 pl 10-3-24.

11

759

W/O:			WORK ORDER CHANGES							
DATE	STEP	PR	OCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	• Approval QC Inspector		
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Part No	) <b>:</b>	PAR #:	Fault Category:	<b>NCR:</b> Ye	s No DQ	<b>4</b> :	Date: _			
	Resolution	n:	Disposition:	OA: N/C	Closed:		Date:			

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC Corrective Action Section B			Verification		Annroyal	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspecto
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March 10, 2010 9:55:07 AM

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Work Order ID: 56790

Parent Item: Parent Item Name:

D205-634-041

Replacement Skidtube

Comments:

IPP Rev:N∷02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30 □KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

**Start Date: 10/03/2010** 

Required Date: 26/03/2010

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

200

Each

1,499.000 50.0000



Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST350	1499	
112314	13	
112720	12	
112724	3	
112829	1	
112991	2	
113121	64	
113226	344	
113644	12	
113749	48	
114103	500	

500

50 pt 10-3-24.

114108

		WO	RK ORDER CHANG	GES					
STEP	PRO	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
		=441							
:	PAR #:	Fault Cated	iorv:	NCB: Yes	No DC	ιΔ-	Date:		
	,	WORK ORDE	R NON-CONFORM	ANCE (NC	R)	-			
STEP	Description of NC Section A	Initial	Action Description	ription Sign &			Approval	Approval QC Inspector	
		Chief Eng	Chief Eng	Dat	е		Office Eng	QO INSPECTO	
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March 10, 2010 9:55:07 AM

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Work Order ID: 56790

D205-634-041



Parent Item Name:

Replacement Skidtube

Comments:

Parent Item:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork

IPP Rev:P 07-07-09 SS Wearplates & Gaskets

**Start Date: 10/03/2010** 

**Required Date: 26/03/2010** 

Start Qty: 1.00

Required Qty: 1.00

AN960C10L

Purchased

No

200

Each

388.0000 50.0000



washer

D3566-13 \*

NAS149 CO332R

Warehouse	Loc Qty	Loc Code
<b>Location</b>		
OFFSHORE 113691		
FG (1564)	100	
103585	100	
Main Warehouse		
ST	288	
112116	128	
112612	160	
2	200 Each	72.0000 1.0000

Gasket

Manufactured No



Warehouse Loc Qty Loc Code Location Main Warehouse FP 70 53461 4 70 Main Warehouse ST 2 45717 1 50265

Bl 10-3-24.

50. Al 10-3-24.

W/O:			WO	RK ORDER CHANG	ES				,						
DATE	STEP	PRO	OCEDURE CHAP	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector						
Part No	:	PAR #:	Fault Categ	Jory:	NCR: Yes	No <b>DQA</b>	:	Date: _							
Resolution:			Disposition: QA: l			QA: N/C Closed: Date:									
NCR:			WORK ORDE	R NON-CONFORMA	ANCE (NCF	R)									
DATE	STEP	Description of NC		Corrective Action Section		Verifica	Verification		Verification		Verification Appl		Verification Approval		Approval
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	Section		Chief Eng	QC Inspector						
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March 10, 2010 9:55:07 AM

Page 7

Work Order ID: 56790

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

**Start Date:** 10/03/2010

**Required Date: 26/03/2010** 

Start Qty: 1.00

Required Qty: 1.00

D3566-5

Manufactured No 200

Each

23.0000 1.0000

Gasket

Warehouse	Loc Qty	Loc Code	
Location			
Main Warehouse			
FP19	19		
55026	7		blue and
55335	12		1 12/0-3-24.
Main Warehouse			·
ST	4		
36113	1		
46186	1		
47318	1		<del></del>
51260	1		

W/O:			WO	RK ORDER CHANG	ES					· · · · · · · · · · · · · · · · · · ·	
DATE	STEP	PR	OCEDURE CHAI	NGE	В	у	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
<del></del>											
Part No	:	PAR #:	Fault Cate	gory:	_ NCR: `	∕es N	lo <b>DQ</b>	<b>4</b> :	Date:		
	Resolution: Disposition:			n:	QA: N/C Closed: Date:						
NCR:			WORK ORDE	R NON-CONFORM	ANCE (N	ICR)					
DATE	STEP	Description of NC	Corrective Action Section I			Ve		rification	Approval	Approval	
	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng		gn & Date	Section C	Chief Eng	QC Inspector		
		,									
										ŀ	

March 10, 2010 9:55:07 AM

Work Order ID: 56790

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 10/03/2010

Required Date: 26/03/2010

Start Qty: 1.00

Required Qty: 1.00

D3566-1

No Manufactured

Manufactured

No

200

Each

33.0000 2.0000



Gasket

Warehouse	Loc	c Oty	Loc Code		
<b>Location</b>					
Main Warehouse					
FP		28			
52512		3			
54480		1			
55011		1			
55320		3			hel and
56532 ✓ ′		20			2 /0/ 10-3-24.
Main Warehouse					
ST		5			
46349		1			
51218		1			
51259		3			
	200	Each	9.0000	1.0000	

D3564-11

Wearshoe

Warehouse	Loc Qty	Loc Code	
<b>Location</b>			1 1
Main Warehouse			1 Bl 10-3-24
FP19 56834	7		
55332	7		
Main Warehouse			
ST	2		
45823	1		
50112	1		

		· ·							
W/O:			WO	RK ORDER CHANGE	S				
DATE	STEP	PROCEDURE CHANGE				Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						* = + + + + + + + + + + + + + + + + + +			
Part No	:	PAR #:	Fault Categ	Jory:	NCR: Yes	No <b>DQ</b>	A:	Date:	
				QA: N/C Closed: Date:					
NCR:		,	WORK ORDE	R NON-CONFORMAL	NCE (NCF	R)			
DATE	STEP	Description of NC	(	n B	Verific	cation	Approval	Approval	
DAIL	Section	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Section C			QC Inspector
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				***************************************					

March 10, 2010 9:55:07 AM

Page 9

Work Order ID: 56790

D205-634-041

Parent Item Name:

Parent Item:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28⊔FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Manufactured

No

ST

44659 45825 Start Date: 10/03/2010

**Required Date: 26/03/2010** 

Start Qty: 1.00

Required Qty: 1.00

D3564-13

Manufactured No 200

Each

33.0000

1.0000

3 183103 1883 1981 BRID BRID BID 19880 HEAR IN 1881

Wassalass	

Wearshoe	

Warehouse	Lo	c Qty	Loc Code		
<b>Location</b>					
Main Warehouse					
FP17 /		21			
56285		21			_1 Dl 10-3-24.
Main Warehouse					
ST		12			
45409		2			
46495		10			
	200	Each	18.0000	1.0000	

D3564-9

Wearshoe

Warehouse Loc Qty Loc Code Location Main Warehouse FP19 16 55025 55334 V 12 Main Warehouse

2

- Bl 103-24

W/O:			WC	RK ORDER CHANG	ES	0			
DATE	STEP	PRO	PROCEDURE CHANGE				Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	gory:	_ NCR: Yes	No .DQ/	A:	Date:	
		solution:							
NCR:			WORK ORDI	ER NON-CONFORMA	ANCE (NC	R)			
DATE	STEP	Description of NC	f NC Corrective Action Section I			Verific	cation		Approval
	Section A	Initial Chief Eng	Action Description  Chief Eng	Sign Date	& Secti	tion C Chi	Chief Eng	QC Inspector	
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March 10, 2010 9:55:07 AM

Work Order ID: 56790

Parent Item:

D205-634-041

Parent Item Name: Replacement Skidtube

Comments:

IPP Rev:N  $\square$  02.08.28  $\square$  FP was QC5 in Step 27; Added QC5 to Step 30  $\square$  KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

D3564-5

Manufactured No 200

Each

33.0000 1.0000

Start Date: 10/03/2010

Start Qty: 1.00

Wearshoe

Warehouse	Loc Qty	Loc Code
Location		
OFFSHORE		
FG	2	
34806	2	
Main Warehouse		
FP19	29	
51925	1	
54772	4	
55024 🗸	12	1 \$k 10-3-24.
55333	12	
Main Warehouse		
ST	2	
45824	1	
47433	1	

Page 10

**Required Date: 26/03/2010** 

Required Qty: 1.00

Dart	Aero	space	Ltd
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W/O:		WORK ORDER CHANGES										
DATE	STEP	PROCEDURE CHANGE				Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
Part No:		PAR #:	Fault Categ	ory:	NCR: Yes	NCR: Yes No DQA: Date:						
	Resc	olution:	Disposition	:	_ QA: N/C	Closed:		Date:				
NCR:		,	WORK ORDE	R NON-CONFORMA	NCE (NC	R)						
DATE	STEP	Description of NC	(	on B	Verifi	cation	Approval	Approval				
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign Dat		ion C	Chief Eng	QC Inspector			
								-				

March 10, 2010 9:55:07 AM

Work Order ID: 56790

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

**Comments:** 

D2594-3

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

No

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

Manufactured

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

200

Each

500.0000 16.0000

Start Date: 10/03/2010

Start Qty: 1.00

O-Ring, 205 Skidtube

Warehouse	Loc Oty	Loc Code	
<u>Location</u>			
Main Warehouse			
FP	487		
51613 55546	27		A.1
55546 ✓	460		16 DK 10-3-24
Main Warehouse			
ST	13		<del></del>
52562	13		

Page 11

**Required Date: 26/03/2010** 

Required Qty: 1.00

W/O:	W/O:		WORK ORDER CHANGES								
DATE	STEP	PRO	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
Part No:		PAR #:	Fault Cate	gory:	NCR: Yes	No DQ					
	Res	solution:	Disposition	າ:	_ QA: N/C CI	osed:		Date: _			
NCR:			WORK ORDI	ER NON-CONFORMA	NCE (NCF	₹)					
DATE	STEP	Description of NC			A ation Description Circum 9 Verificati				Approval		
		Section A	Initial Chief Eng	Action Description Chief Eng	Date	Sect	ion C	Chief Eng	QC Inspector		
						E E					

March 10, 2010 9:55:07 AM

Work Order ID: 56790

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N $\Box$ 02.08.28 $\Box$ FP was QC5 in Step 27; Added QC5 to Step 30 $\Box$ KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09

SS Wearplates & Gaskets JLM

Page 12

**Start Date:** 10/03/2010

**Required Date: 26/03/2010** 

Start Qty: 1.00

Required Oty: 1.00

D2594-1

Manufactured No 200

Each

577.0000 16.0000



Plug, 205 Skidtube

Warehouse	Loc Qty	Loc Code	
<b>Location</b>			
Main Warehouse			
FP	449		
54008	1		
54643 /	15		<u></u>
55002	433		16. OL 10-3-04, 24
Main Warehouse			300
ST	128		<u>.</u>
42221	16		
42807	92		
43884	3		
46435	2		
51527	9		
51757	6		

W/O:		WORK ORDER CHANGES										
DATE	STEP	PRO	PROCEDURE CHANGE				Date	Qty	Approval, Chief Eng / Prod Mgr	Approval QC Inspector		
Part No: PAR		PAR #:	Fault Categ	ory:	NCR: Yes No DQA: Dat							
Resolution:			Disposition	i:	QA: N/C	Clos	ed:		Date: _			
NCR:			WORK ORDE	R NON-CONFORM	ANCE (N	CR)						
DATE	STEP	Description of NC	(	tion B		Verification		Approval	Approval			
	J.L.	Section A	Initial Chief Eng	Action Description Chief Eng		n & ate	Section C		Chief Eng	QC Inspector		
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	22212			
	DESIG	*#	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
	CHEC	KED.	APPROVED	DRAWING NO. REV. D
				D2580 SHEET 1 OF 3
ļ	DATE			TITLE SCALE
	07.0	02.27		205 SKIDTUBE ASSEMBLY NTS
	Α		96.09.16	NEW ISSUE
	В		96.12.02	AS MANUFACTURED
	С		98.08.26	REDRAWN, INCLUDED DEO 9094/9097
	D		07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183



QTY -041	QTY -045	Part Number	Description	
Х		D2580-041	SKIDTUBE ASSEMBLY	
	X	D2580-045	SKIDTUBE ASSEMBLY	
1	1	D2500-1-190	EXTRUSION	
1	1	D2576-3	STEP	
20	24	D2579	CROSS BOLT SPACER	SHOW LAY
16	16	D2594-1	PLUG	R. : * ()
16	16	D2594-3	O-RING	ENCRET
1	1	D2596	205 WEB	NCONTIL PARTY
1	1	D2855	AFT CAP	UBJECT AMA
1	1	D3564-5	WEARSHOE	Milan 1941
1	1	D3564-9	WEARSHOE	WITH FROM E
1	1	D3564-11	WEARSHOE	WIRE
1	1	D3564-13	WEARSHOE	NO_56790 PA10-3-10
2	2	D3566-1	GASKET	
1	1	D3566-5	GASKET	BH10-211
1	1	D3566-13	GASKET	70010 340
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT	
50	50	AN3C4A	BOLT	
2	2	AN3-5A	BOLT	
50	50	AN960C10L	WASHER	
2	2	AN960JD10L	WASHER	

#### **GENERAL NOTES:**

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:

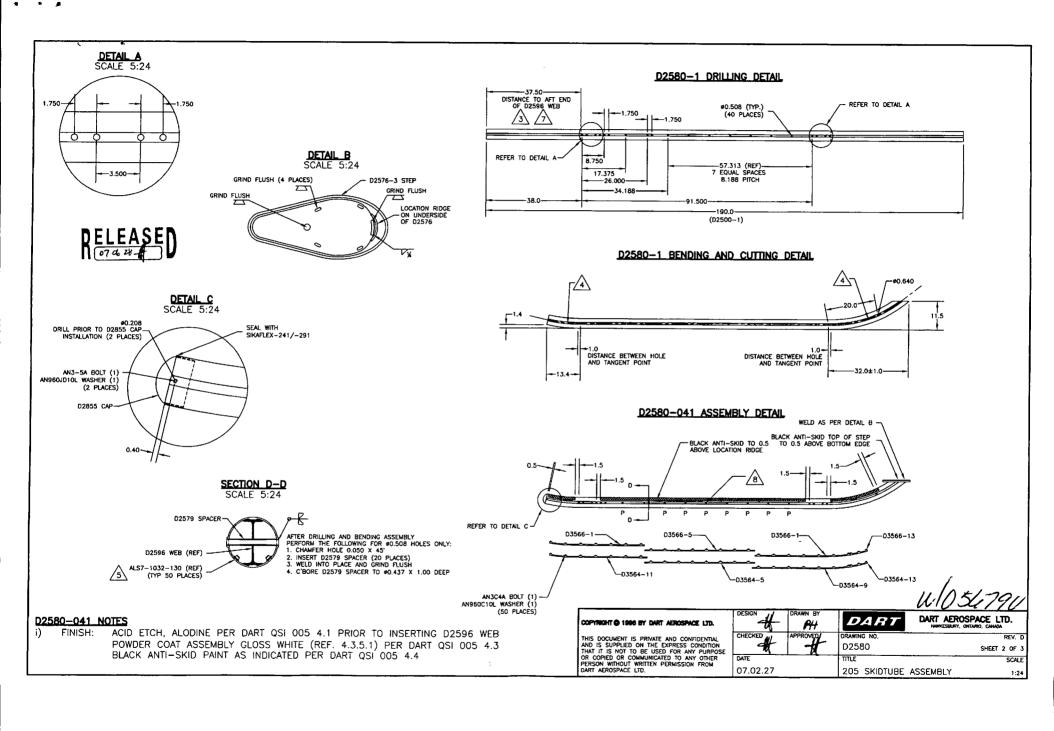
SEE NOTES ON PAGE 2 FOR D2580-041 AND PAGE 3 FOR D2580-045

INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

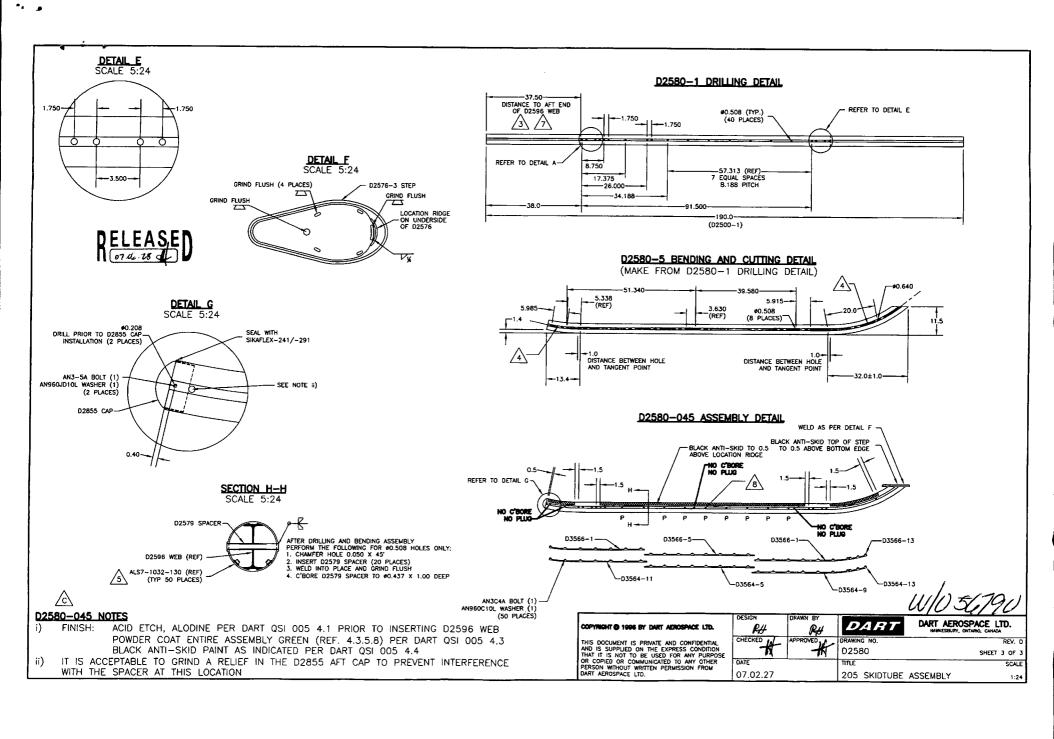
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W/O:		WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE			Ву	, <u> </u>	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
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Part No:			Fault Category: NCR: Yes No DQA:								
Resolution:									Date:		
NCR:			WORK ORD	ER NON-CONFORMA	NCE (N	CR)					
DATE	STEP	Description of NC	1	Corrective Action Section		0: 0		cation	Approval Chief Eng	Approval	
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W/O:			WO	RK ORDER CHANG	GES						
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Part No						ICR: Yes No DQA: Date:					
	Resc	olution:	Disposition	:	QA: N/C C	losed:	sed: Date:				
NCR:			WORK ORDE	R NON-CONFORM	ANCE (NCI	<b>3</b> )					
DATE	STEP	Description of NC			tion B		Verification A		Approval		
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign o		n C	Chief Eng	QC Inspector		
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W/O:			WO	<b>RK ORDER CHANG</b>	ES						
DATE	STEP	PRO	OCEDURE CHAN	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
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Part No:		PAR #:	Fault Categ	ory:	_ NCR: Yes	No <b>DQA</b>	lo DQA: Date:				
			Disposition	:	_ QA: N/C Clo	osed:	sed: Date:				
NCR:		•	WORK ORDE	R NON-CONFORMA	ANCE (NCR	)					
DATE	STEP	Description of NC	Corrective Action Section B			Verific	ation				
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		Chief Eng	QC Inspector		
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		. 44.									
-							T				

# AWS D17.1.2001 QUALIFICATION TEST RECORD

Name: Barday Elliett	
Job number: 56 184	
Part number: D205 634.041	
Description: 205 skid tube	
Welding Process: Tig Mig ]	
Welding Process: Tig[ Mig[]  Base materiel: Alumination	
Current: AC[ ]	

## **TEST REQUIREMENTS AND RESULTS**

Visual: Penetration:	pass[] fail[] pass[] fail[]
<u>UNACCEPTABLE</u>	
Cracks:	pass[/ fail[]
Undercut:	pass[ ] fail[ ]
Pin holes:	pass[ ] fail[ ]
Overlap (cold lap)	pass[ fail[ ]
Porosity (surface):	pass[] fail[]
Coloration:	pass[ ] fail[ ]
Qualifier 6 1/1	Date of Test Coupon 10.02.23
Welder Barday Ellipst	Date of Test Coupon 10-02-23

The above named individual is qualified in accordance with AWS D17.1.2001 to weld